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ABSTRACT

Noting that loss of control is a major concern confronting patients experiencing an illness, this paper critically analyzes the research literature on control and clarifies the implications of this research for provider-patient communication. The paper first defines control, noting that the most frequently cited definition is the "locus of control" perspective, which categorizes perceptions of control as internal or external. The paper then examines what patients are likely to want to control, such as environment, treatment, and relationships with care providers. The reasons control is important for patients are then discussed, followed by descriptions of three conceptualizations of control and how they apply to the patient-provider relationship. The first concerns locus of control research, which examines whether patients believe they are responsible for their illness, or attribute it to outside forces. The behavior perspective is then addressed, which looks at how patients respond to their situations, followed by a discussion of the relational control perspective, which looks at control as a process. A summary notes that further research is needed on ways these perspectives contribute to an understanding of control in provider-patient communication. Five pages of references are included. (JC)

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Control and Communication in Provider-Patient Relationships

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> A newly diagnosed cancer patient expressed great relief when a nurse told him that it was quite normal to have irrational reactions to the diagnosis of cancer. This information confirmed for the patient that events were not out of control -- that he was still in charge of what was happening.

Loss of control is a major concern confronting patients during the illness experience (Levanthal, 1975; Taylor, 1982). Illness results in people feeling less certain about how to handle and control life events and lessens individuals' feelings of predictability and mastery about their lives. Illness reminds people that they are vulnerable and susceptable to negative events beyond their control.

The overall purpose of this paper is to critically analyze the research literature on control and to clarify the implications of this research for provider-patient communication. This paper will assess several different conceptualizations of control and discuss the advantages and disadvantages of each approach for understanding communication in the provider-patient context. In addition this paper will discuss various methodologies which have been used to assess control. Throughout this paper the emphasis will be on how theories of control can inform our understanding of provider-patient communication.

Control as it functions in human behavior has been the focus of a vast number of research studies. An analysis of this body of research suggests that there has been no singular or consistent approach taken in the study of control. As a research construct, control is difficult to assess because it relates to and encompasses a very wide range to human behavior. Therefore, prior to beginning a discussion of the methodological and conceptual issues inherent in control research, it is appropriate to address several basic questions about control. These questions include: What is meant by control? What needs to be controlled? and, Why is control important?

What Is Control?

Control has been used in many ways to describe a widely diverse set of phenomenon including power, locus of control, personal control, learned helplessness, competence, and self-efficacy, to name a few. A commonly accepted definition of control is that control is "the intentional manipulation of material for the production of desired outcomes (Chenowitz & Langer, 1980, p. 104)." Control exists when an individual actively chooses certain responses for the purpose of obtaining certain outcomes.

Several important clarifications pertaining to how control should be defined have been suggested by Langer (1983, pp. 14-21). First, control should not be equated with simple "choice." Although choice is an inherent part of control, there are situations in which too many choices run counter to the patient's feelings of control. For example, when a patient has the opportunity to choose between 5 or 6 different kinds of treatment the patient may feel overwhelmed and less control than if the patient has only two options to consider. Second, control is not the same as power. Power focuses on an individual's ability to effect outcomes through the use of money, property, position, knowledge, etc.. Control, on the other hand, is a more intrapsychic and stable construct and is less oriented toward current external events. Third, control should not be conceived as a static phenomenon. Control is not just the ability to make choices or the resulting outcomes of those choices, but rather control is the active process involved in making choices. Lastly, control should not be conceived as a mindless process. For control to exist, a person needs to be aware of his or her actions. In short, control is the process of mindful involvement (Langer, 1983).

Perhaps the most frequently cited definition of control is the definition employed in the locus of control perspective. Lefcourt (1980) suggested that locus of control "represents an abstraction made by individuals as to their likelihood of being able to effect particular outcomes" (p. 258). For individuals who believe that their own behavior determines what happens to them, the locus of

control is said to be internal. For individuals who believe that outside forces or factors primarily determine what occurs in their lives, the locus of control is called external.

In the work of Antonovsky (1979), control has been described as a "sense of coherence". From this perspective control refers to an individual's feeling of being at one with the world. A sense of coherence is created from the "feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out (p. 123)." Patients, for example, feel coherence when they experience a sense of being a part of the health care decision-making, connected to their own treatment.

Similar to Antonovsky, Rothbaum, Weisz, & Snyder (1982) conceived of control as a two-process construct. The first process, which they label primary control, refers to an individual's attempts to change the external world so as to meet the individual's own needs. The second process, which they label secondary control, involves attempts by an individual to fit in with the world and to 'flow with the current'. Secondary control refers to how individuals obtain stability within themselves in situations in which they are unable to affect the outcomes of external events.

Arnkoff & Mahoney (1979) have suggested that control has four different but related meanings: skill, power, regulation, and restraint. Control, as skill, refers to an individual's internal capabilities to make choices. Defined as a skill, control is similar to Bandura's (1977) notion of self-efficacy -- one's belief in their own capability. Control, as power, refers to an indiviual's capacity to control resources or reinforcements. Rotter's (1966) work on locus of control falls within this interpretation of the meaning for control. Defined as regulation, control refers to an individual's capacity to balance short and long-term goals and to balance concerns for self with concerns for society. Control, as restraint, refers to an individual's self responsibility and willpower including the individual's ability to keep from "getting out of control."

A typology of control has been suggested by Averill (1973) who distinguishes three types of control: behavioral, cognitive, and decisional. Behavioral control is "the availability of a response

which may directly influence or modify the objective characteristics of a threatening event" (pp. 286). Cognitive control is "the way in which an event is interpreted, appraised, or incorporated into a cognitive 'plan'" (p. 287). Decisional control is "the opportunity to choose among various courses of action" (p. 287).

A slightly different representation of control has been proposed by Thompson (1981) who has suggested a four fold typology comprised of behavioral control, cognitive control, information, and retrospective control. Behavioral control is the belief that one can utilize one's own behavior to alter the probability, intensity, or duration of a threatening event. An example would be a diabetic patient who conscientiously gives himself or herself insulin. Cognitive control is the belief that one can develop mental stategies that will influence the circumstances that affect one's life. A patient who practices distraction before a threatening medical procedure is using cognitive control. Control as information is the belief that an individual can acquire knowledge about external events that affect that person's situation. A patient who attempts to read everything possible about their illness is utilizing information as control. Retrospective control is the belief that a person can accept responsbility for events in the past, thus mastering the situation after it has happened. A patient who spends a great deal of time focusing on the possible causes for his or her disease is using retrospective control.

In summary, control is a process of making mindful choices about life events. Control includes the belief that one can influence or have an impact on the internal and or external circumstances effecting one's life. Control is encouraged in an environment that encourages mastering (Langer, 1982). Control exists when individuals intentionally attempt to master the responses they make to the events impinging on their lives.

Control Over What?

The second question, "control over what?" is difficult to answer because of the broad

spectrum of things, people, and events over which individuals can exert control. In the context of health care, patients confront a multitude of experiences over which control is a desirable response. Virtually any event, condition, or circumstance that can be influenced by an individual has the potential to provide control.

During the course of an illness patients are often required to adapt (or exert control) in several areas. First of all, patients have a need for control over the illness itself, including its onset, severity, duration, and potential recurrence (Moos & Tsu, 1977). Control over the illness includes dealing with pain, dealing with special treatments, coping with side-effects, or living with changes in body image, to name just a few. Patients have a need to influence the way in which the illness has an impact on the their life. Illness invades one's personal space and a common response is to attempt to control the situation by ridding oneself of the illness.

Secondly, patients have a need to exhibit control over the environment surrounding their illness. In this case the "what" that is being controlled is not the illness itself but various other factors brought on because of the illness. The patient may attempt to control the layout of the furniture in his or her hospital room, the time and scheduling of various hospital treatments, the methods of acquiring routine medical data such as temperature and blood tests, or simply the degree of privacy the patient has in his or her room.

Third, patients have a need to control the relationships they have with health providers, family members, and others. Some patients may want to be very dominant toward physicians while others may want their physicians to be dominant. Both perspectives indicate a desire to influence the provider-patient relationship. A major way of influencing relationships is for patients to attempt to control their communication with others. By controlling what they talk about and how they talk about it patients may feel more in control of their relationships. For example, cancer patients may want to talk about their illness in a special way and to that end may force others to adapt to these expectations. Similarly, patients may want family members to play certain specific roles toward them and as a result they communicate in ways so as to get family

members to exhibit these roles. If patients are allowed to set the pace for their conversations with others, they obtain a stronger sense of control in their relationships.

In addition to trying to control the illness, environment, and their relationships, patients also want control over their own internal response to the illness experience. The attempt by patients in this area is to bring themselves into line with environmental forces (Rothbaum, Weisz, & Snyder, 1982). Control in this area includes, for example, preserving a reasonable emotional balance, preserving a satisfactory self-image, and preparing for an uncertain future (Moos & Tsu, 1977). Although patients may not be able to control their illness, they can control, or have an impact on, how they choose to respond to their illness. Control emerges for patients through the messages, and therefore meanings, they give themselves about their circumstances. In essence, that which is being controlled in this area is the self's response to the illness experience.

Why Is Control Important?

Acquiring a sense of control is particularly important to patients because there exists some evidence to suggest that perceived loss of control is negatively related to effective coping (Langer, 1983). Control appears to play a major role in determining how people react to stressful life events. The rationale for this argument has been described by Janis (1983) who suggests that if individuals cannot control an aversive experience their initial reaction is anger and hostility. This is followed by demoralization if an individual's efforts to regain a sense of control continue to be thwarted. The end-result of this cycle is ineffective coping and profound feelings of helplessness and depression. Langer (1983) goes so far as to suggest that perceived control is crucial to both an individual's psychological as well as their physical well-being.

In an analysis of the literature which focuses on the links between control and reduced stress, Thompson (1982) has suggested three general arguments which underscore the reasons for why control is important. First, control lessens stress because it gives predictability to individuals and predictability makes negative events less aversive. For example, cancer patients on

chemotherapy who are able to gain a sense of predictability by routinizing certain of their behaviors during treatment may find the chemotherapy treatment process less difficult. In the hospital setting, research has shown that patients who are given information about a negative medical procedure before the event, are able to respond to the event more easily (Johnson & Leventhal, 1974). The argument being made in these examples is that control is beneficial because it gives predictability regarding an aversive event and lessens cognitive overload in a stressed environment.

A second reason suggested by Thompson for the importance of control is that control has positive effects on an individual's self-image. People want to control the images of self they present to others (Schlenker & Leary, 1982). They want to feel competent and have a sense of mastery in their environment (deCharms, 1968; Chanowitz & Langer, 1980) and control satisfies this need. Patients feel better about themselves when they gain a sense of being competently involved in their own circumstances. They develop negative feelings about themselves when they are unable to act as they choose or when life events appear out of their control (Thompson, 1982, p. 97).

A third argument for the value of control is based on Miller's (1979) minimax hypothesis which suggests that control is useful because it allows people to minimize the worst possible outcomes of a negative event. Through exerting a degree of control patients can acquire a feeling that they will be able to withstand an unbearable situation. For example, a patient who chooses his or her own anesthetist for a major surgery may feel more confident because the person's potential future danger has been minimized.

It also has been argued that control is important because it has a positive impact on people's overall health. Using the locus of control paradigm, Seeman and Seeman (1983) found that a sense of control was associated with practicing preventive health measures, more optimism about the efficacy of early treatments, higher ratings on self-health status, fewer reported episodes of chronic and acute illnesses, less bed confinements, and less dependence on physicians.

In summary, control is important to patients because it gives them a feeling of competence in a context filled with events that create feelings of incompetence. Illness, as a rule, has a negative impact on patients' ability to make choices and exert influence. To avoid the feelings of powerlessness, helplessness, and anomie that accompany illness patients require a sense of control. Through exhibiting control, patients can reduce the aversiveness of illness, enhance their own self-image during the illness experience, and lessen the impact of the worst possible illness outcomes.

Conceptual Approaches to Control

In this section, three different conceptualizations of control will be described and assessed as they have application to the understanding of provider-patient communication. The approaches to be covered are locus of control research, the behavioral perspective, and the relational control perspective. The intent here is to provide a description of each of the conceptualizations in a way that will be useful to an understanding of how control functions in provider-patient interaction. Although not inclusive of all the approaches to control, the conceptualizations selected for review are three which appear most salient to provider-patient communication.

Locus of Control Research

Research on locus of control originated with Rotter (1954) and social learning theory. According to this theory, individuals develop certain expectations about the influences or impact of their own behaviors through a learning process. For example, the person who believes that engaging in exercise routines and diet alterations will limit the occurrence of heart problems is operating from an internal control perspective. Conversely, the person who assumes that heart problems are due to heredity and nothing can be done to prevent them is operating from an external perspective. Locus of control, then, is a personality variable that discriminates between internally oriented and externally oriented individuals.

As a personality variable, it is regarded "as a description of individuals that transcends situational specificity to some degree (Lefcourt, 1980, p. 246)."

Locus of control in general has been measured by Rotter's Internal-External (I-E) scale (1966). More specifically, the locus of control of an individual's health beliefs has been measured by the Health Locus of Control (HLC) scale (Wallston, et al. 1976) and by a more refined version of this scale, the Multidimensional Health Locus of Control (MHLC) scale (Wallston, Wallston, & DeVellis, 1978). The items on the MHLC instrument directly assess individuals' beliefs about whether responsibility for health-related matters lies within themselves, with others, or in external events.

In the locus of control perspective, control has been studied as a factor related to the following: learning health information, influencing health care professionals' decisions, receiving feedback, seeking help from experts, complying with others' wishes, responding to threats, knowledge about disease, ability to engage in preventive health actions, effective use of medications, and following medical regimens (Arakelian, 1980; Lau, 1982), to name some.

Although the locus of control perspective has provided an immense amount of data regarding health behavior, research on locus of control has its limitations. First, internal-external locus of control is regarded as a personality variable, and it is therefore questionable whether or not individuals can learn to change their locus of control even if they would benefit from doing so. Second, there is tendency for researchers to imply that it is good to be "internal" and bad to be "external" (Rotter, 1975). Yet there may be situations in which it is not always healthy to maintain a high internal perspective (Lefcourt, 1980) or in which it may be realistic to relinquish some personal control in health matters. For example, to assume that a client could prevent certain progressive diseases could be unrealistic and could generate a great deal of guilt or self-blame in the client. Similarly, an internally oriented cardiac patient who attempts to control his or her own behavior during a cardiac arrest could be self-destructive. Wortman and Brehm (1975) have suggested that overemphasizing a person's sense of control in these types of

situations may be maladaptive, and they recommend that an accurate assessment of a person's potential for control in a specific situation is more useful for individuals. A final criticism of locus of control , or the personal control perspective, is that measures of locus of control have not been reliable predictors of health-related behaviors (Lowery, 1981; Wallston & Wallston, 1982; Rock, Meyerowitz, Maisto, & Wallston, 1987). That is, these measures have not added to our understanding of clients' health behaviors.

In spite of the above criticisms, the locus of control perspective has contributed substantially to our understanding of control in provider-patient communication. This conceptual approach provides: 1) an established widely used personality measure of control, 2) an assessment of the patient's disposition for control -- 1/2 of the provider-patient dyadic relationship, and 3) a plethora of accumulated research findings regarding health-related behavior. On the negative side, this perspective treats control as a static variable which fails to capture of the dynamic transactional dimensions of provider-patient interaction.

Behavioral Perspective

Unlike the locus of control perspective, which conceptualizes control as a personality variable, the behavioral perspective focuses on control as it is expressed through individual behavior. The emphasis in this approach has been on studying how people respond in various situations in which their levels of control are altered and how people react to the negative and positive consequences of their attempts to control in these circumstances.

Much of the research in this area has been conducted in the laboratory setting where individuals are asked to respond to aversive events such as shock, loud noise, or aversive photographs, for example. By varying the amount of control over aversive events available to subjects, researchers have been able to assess how control effects stress and other health-related outcomes. Examples of some of the major findings that have emerged using this approach include: 1) behavioral control reduces arousal as one anticipates shock, 2) behavioral control increase

tolerance to shock, 3) cognitive control reduces self-reported anxiety, and 4) cognitive strategies increase tolerance to pain and pain thresholds (Thompson, 1982, pp. 91-93).

In addition to the laboratory setting, this paradigm for control research has also been employed in various field studies of control. Most well known is the work of Langer, et al. (1975), Langer and Rodin (1976), and Langer (1982) who have assessed the impact of control on surgical patients and on institutionalized elderly populations. For surgical patients, these researchers found that cognitive control through cognitive reappraisal, calming self-talk, and selective attention was positively related to less postoperative stress and fewer pain relievers and sedatives. In the elderly population, Langer et al. found that giving residents the opportunity for decision-making, encouragement to make decisions, and the responsibility for something outside themselves (e.g., taking care of a plant) had a profound effect on residents levels of activity, felt happiness, mental alertness, and mortality rates. In both of these series of field studies control had a positive impact on patients' health status.

The behavioral perspective was used by Taylor (1979, 1982) in an analysis of hospital patient behavior. She suggests that loss of control is a common occurence for patients who confront routinization of hospital procedures, bureaucratic hospital conditions, depersonalization, and lack of information. Taylor contends that patients react to the experience of loss of control by displaying "good" or "bad" patient behavior, neither of which is optimal for improving patients' health status. Allowing patients to be informed participants in their own care is proposed by Taylor as a strategy to reduce the anxiety created by loss of control.

The behavioral approach to control adds to our understanding of the role of control in provider-patient communication by underscoring the critical importance of control. The strongest evidence for why control is an essential element in effective health communication comes from this research perspective. Furthermore, a another strength of this approach to control is that is has allowed researchers to study control in the laboratory and the field using experimental design strategies. A weakness of this approach is the variety of ways control has been defined and

measured within this paradigm. Another weakness is that this approach is static and fails to capture the process dimension of control (Langer, 1982, p. 138). This approach assesses the ways people control and the outcomes of different control strategies but this approach has not focused on the controlling process. Lastly, this approach has been directed at patients' control of their health care environment but not toward the patient's control in health care relationships.

Relational Control Perspective

The relational control perspective is substantially different from the locus of control and behavioral perspectives because it focuses on control as it occurs in relationships. From this perspective, control is viewed as a process which defines and determines where people stand with each other in regard to who is on top and who on the bottom, who is dominant and who is submissive, or who has influence and who is being influenced. Control is regarded as a transactional process which emerges from the interaction that occurs between individuals in a relationship. This paradigm is represented by the work of researchers such as Bateson, 1972; Haley, 1963; Jackson, 1959; Watzlawick, Beavin, and Jackson, 1967; Miller and Rogers, 1976; and Parks, 1977, to name a few.

Based on different variations of relational control, relationships between individuals can be characterized in three different ways: complementary, symmetrical, or parallel. In complementary relationships, the control is unequally distributed (Miller & Rogers, 1976; Watzlawick, Beavin, & Jackson, 1967), one person being dominant and the other being submissive. In the classic medical model, health providers are commonly the individuals who are more dominant and patients are typically more submissive (Krantz & Schulz, 1980). In current health care contexts, clients are often taking more responsibility for health-related decisions; it is no longer normative for providers to automatically be in the dominant position. In symmetrical relationships control is shared equally by participants, and the differences between individuals are minimized. Symmetrical relationships are sometimes characterized by competition for

control or submission. It is not always clearly established who is in control in symmetrical relationships; the relationship may constantly be redefined (Wilmot, 1979). Parallel relationships develop from interactions in which control is transferred back and forth between participants. It is a flexible mode of interaction which is less likely to result in dysfunctional communication (Wilmot, 1979). Health professionals who take turns at exerting and giving control would be an example of a parallel relationship.

A common method of measuring relational control is the Rogers and Farace (1975) coding scheme which indexes the "command" aspects of verbal exchanges in a conversation. In this scheme, verbal messages are classified in three ways: 1) one-up -- an attempt to assert definitional rights, 2) one-down -- a request or an acceptance of the other's definition of the relationship, and 3) one-across -- a non-asserting, non-accepting, leveling movement (Miller & Rogers, 1987). The modes of interaction individuals use are assessed for recurring control sequences and patterns.

Some of the criticisms of this approach to measuring control include: 1) that it focuses exclusively on the verbal dimensions of interaction and ignores nonverbal dimensions, 2) that it focuses on surface "how" patterns of interaction and not "why" patterns, 3) that it has certain reliability and validity weaknesses, and 4) that it fails to capture certain relational control information in content statements (Seibold, Cantrill, & Myers, 1985).

The relational control perspective has certain advantages for the study of control in provider-patient communication. First, it is an approach which, more than any other approach, analyzes control through an assessment of communication dimensions of the provider-patient relationship. In addition, it is a systems approach that focuses on the transactional, processual, and relational nature of the provider-patient relationship. As a systems approach, this methodology captures an assessment of control which reflects the emergence of control in a relationship in which both participants simultaneously create the control process.

Although the relational control methodology is a potentially powerful appproach for

assessing provider-patient communication, at this point, this methodology has not been used frequently, if at all, in health communication research.

In summary, this paper has attempted to synthesize and analyze control research as it has application to provider-patient communication. The process of control has been studied by researchers from a variety of fields and described in multiple ways. Research in health communication needs to continue to make efforts to clearly define what the process includes and how it operates. In addition to the locus of control, behavioral, and relational control perspectives analyzed in this paper other conceptualizations of control which may have application to health communication include: psychodynamic research, Bandura's efficacy approach, participation in decision making, access to information research, power orientation research, role theory, existential perspective, Brickman's issues of responsibility, script theory, and social issues regarding the powerless. Further research is needed on the various ways each of these contributes to an overall understanding of control in provider-patient communication.

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